

REMARKS

Applicant respectfully traverses and requests reconsideration.

Applicant respectfully thanks the Examiner for notice that claims 21-40 have been allowed. Furthermore, Applicant notes that various cosmetic amendments have been made throughout the specification. The aforementioned amendments do not add subject matter to the specification.

Claims 41-43 stand rejected under 35 U.S.C. §102(b) as being anticipated by Krause et al., U.S. Patent No. 5,949,948, ("Krause"). In contrast to Applicant's claimed invention, Krause is directed at providing playback features such as fast forward and reverse playback during decompression of encoded video programs. (Column 1, lines 10-13). The reference teaches that the playback modes generally include normal playback, fast forward and reverse playback, slow forward and reverse playback, and pause. (Column 6, lines 54-56). However, Applicant's claims require, among other things, receiving *viewing input data representing a desired start point of stored digital video* and retrieving from memory at least a portion of the stored digital video *based on the viewing input data and based on a successive linear approximation operation*. Instead of utilizing a successive linear approximation operation to retrieve digital video data, Krause appears to use an iterative loop (*See Fig. 3*) to find I-frames during playback modes. Therefore, Krause fails to anticipate Applicant's claimed invention. Moreover, Applicants further notes that Krause appears to be directed at a different problem than Applicant's claimed invention. While Krause is primarily directed at fast forward and reverse playback modes, Applicant's claimed invention allows the realization of, among other things, the *fast seeking* of MPEG video among different non-contiguous video data.

The office action cites column 10, lines 1-21 as teaching the claimed method of retrieving from memory at least a portion of the stored digital video *based on the viewing input data and based on a successive linear approximation operation*. Applicant respectfully submits that the cited portion of Krause appears to be in reference to Fig. 3, a flowchart representing an iterative process for retrieving blocks of frames that may or may not contain a desired I-frame for use in a fast forward or reverse playback mode. In this method, the location of the I-frames on the stored device is assumed to be unknown. (Column 10, lines 6-7; column 9, lines 65-67). Because the process does not utilize viewing input data or successive linear approximation, Krause does not anticipate step (b) of claim 41.

While the process illustrated in Fig. 3 appears to teach a process for retrieving I-frames, a type of stored digital video, the process fails to teach a method of retrieving from memory at least a portion of the stored digital video *based on the viewing input data and based on a successive linear approximation operation*. In contrast, the reference teaches a method in which new blocks of frames are retrieved from the memory device in search of a desired I-frame for a fast forward or reverse playback mode.

Fig. 3 appears to be unrelated to any form of successive linear approximation operation. As utilized in claim 41 and explained in detail in the specification, successive linear approximation operations are utilized to retrieve from memory at least a portion of the stored digital video based upon operations that *linearly approximate* the location of non-linear video data in memory. In contrast, the Krause reference points to an iterative loop in Fig. 3 which is utilized *to find and not linearly approximate* the next I-frame in a storage block of MPEG frames (i.e., I-, P-, and B-type frames). No approximation appears to be performed. The sequence begins in step 300 by initializing a storage block counter to the sequence number of the storage

block last read from the storage device. The next I-frame sequence number to be displayed in either a fast forward or reverse playback mode is then determined in step 310 according to the desired playback mode as illustrated in step 320. By adding or subtracting constant values based upon the type of mode selected, the combination of steps 320, 322 or 324, and 326 are utilized to find a new storage block which may contain the desired next I-frame to be read from memory. After the new storage block is found (by way of calculating its sequence number) in step 326, the block is read from the storage device in step 330 and a determination is made as to whether or not the retrieved block actually contains the next desired I-frame in step 340. If the block contains the next desired I-frame, then the process ends. However, if the retrieved block does not contain the desired I-frame, then the iterative process as described by steps 326-340 are repeated until the desired I-frame is detected.

Krause does not employ a method wherein the location of non-linear video data in memory is linearly approximated. In contrast, Krause uses a loop wherein a constant value is added or subtracted to a counter in an iterative manner to find and read a new storage block of frames. Each frame is then searched for a desired I-frame. If a storage block does not contain the desired I-frame for use in a fast forward or reverse playback mode, the counter is incremented or decremented to find and read another new storage block of frames in search of a desired I-frame. Because the Krause reference relies upon an iterative loop to determine a new block of frames in search of a desired I-frame as utilized in a fast forward or reverse playback mode, and further fails to describe or anticipate a successive linear approximation operation for retrieving from memory at least a portion of the stored digital video, Krause fails to anticipate step (b) of Applicant's claim 41.

For the foregoing reasons, Applicant respectfully believes that claim 41 is in proper condition for allowance.


With respect to claims 42 and 43, Applicant respectfully repeats the relevant remarks made with respect to claim 41 and further notes that claims 42 and 43 are allowable for the same or similar reasons. Applicant respectfully notes that Krause fails to teach "receiving viewing input data *representing a desired start point of stored digital video*" and further fails to teach the "[retrieval] . . . of the stored digital video *based on the viewing input data and based on a successive linear approximation.*" As a result, Krause is incapable of teaching the step of "determining a start memory location from which to retrieve at least a portion of the stored digital video" in accordance with step b of claim 41. Applicant respectfully believes claims 42-43 to be allowable over Krause.

Applicant respectfully submits that the claims are in condition for allowance. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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Vedder, Price, Kaufman & Kammholz, P.C.
222 North LaSalle Street
Chicago, Illinois 60601
Telephone: (312) 609-7500
Facsimile: (312) 609-5005

By: 
Christopher J. Reckamp
Reg. No. 34,414